

Vladimir GROUZDEV, et al.
Serial No. 10/566,274
December 23, 2010

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The Examiner's attention is drawn to the updated cross-reference data now added to the first paragraph of the specification. Concurrently herewith, an IDS is being filed to call attention to at least the prior art cited in these other somewhat related cases. Since the Examiner now has essentially instant electronic access to the electronic IFW (image file wrapper) for the entirety of all of these related applications, it is presumed that there is no need to file a separate copy of each office action, response, etc., from these related cases. However, should the Examiner desire such submissions, it is respectfully requested that the undersigned be telephoned and the undersigned will promptly comply.

The Examiner is thanked for providing a helpful "response to arguments" section in the last office action. Hopefully, the above amendments and following remarks will also assist the Examiner in understanding the applicants' viewpoint.

The rejection of claims 1-3, 6-8, 11, 12, 15, 18, 19 and 21-23 under 35 U.S.C. §102 as allegedly anticipated by Yodaiken '424 is respectfully traversed – and the rejections of claims 13, 16 and 17 under 35 U.S.C. §103 as allegedly being made "obvious" based on Yodaiken in further view of Ratcliff '438 or Tanenbaum or Tanenbaum/Han '564 are also all respectfully traversed.

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Since the above amendment, in effect, *inter alia*, adds the features of original dependent claim 16 to each independent claim, all of the outstanding grounds of rejection have been mooted except for the alleged “obviousness” rejection of claim 16. Of course, as the Examiner will recognize, the above amendments to the independent claims also further define and clarify the claimed invention so as to hopefully make this entire application now allowable for further reasons as well.

The Examiner has recognized that the features of original claim 16 are not disclosed by Ratcliff and/or Yodaiken. However, to supply the recognized deficiencies, the Examiner has raised an obviousness objection based on Yodaiken in view of Tanenbaum. In particular, the Examiner has asserted that it would have been obvious to modify an operating system comprising a TCP/IP stack, as disclosed by Yodaiken or Ratcliff, to include a UDP/IP stack, as disclosed by Tanenbaum, in order to include a connectionless protocol.

The amended independent claims require a second operating system to be a general purpose operating system. A general purpose operating system usually supports both TCP/IP and UDP/IP protocols. In fact, the applicants’ specification explicitly states that the second (general purpose) operating system supports the UDP/IP protocol (see page 10, last paragraph of the specification.) Accordingly, if

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anything was obvious, it would have been only to modify the second (general purpose) operating system to support the UDP/IP protocol.

However, the presently claimed invention recognizes that the real-time characteristics of such protocol may be not good enough. To solve this, the claimed invention requires using a UDP/IP stack running on the primary (real-time) operating system in order to run a performance critical part of a global networking application (like VoIP, for example).

Clearly, Tanenbaum does not suggest such a UDP/IP stack and, moreover, Tanenbaum does not suggest providing such UDP/IP stack in a real-time operating system, particularly if another (the second) operating system that inherently supports the UDP/IP protocol is already present.

In addition, there is no motivation to combine Tanenbaum with Yodaiken or Ratcliff. The present invention is concerned with using a UDP/IP stack in a particular context, not in isolation or in general. Tanenbaum relates to UDP protocol in general. There is absolutely no information in Tanenbaum that would prompt the skilled person to use a UDP/IP stack in the particular context as recited by applicants' independent claims . Accordingly, only undue hindsight can be a basis for the Examiner's assertions.

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On a more general note, the present invention is concerned with making the running of a global networking application more efficient. This is achieved by using a primary operating system to run a real-time networking stack and to migrate a (real-time critical) part of the global networking application from a secondary (general purpose) operating system to the primary one, thereby improving the overall real time characteristics. The cited references are not concerned with this. In particular, Yodaiken uses a supervisory operating system in order to improve the security and availability of the secondary OS on the network. In view of this, it would not have been obvious to add a networking (UDP/IP) stack to Yodaiken because this would not address the use case disclosed therein.

In a prior office action, the Examiner stated that original claim 15 (now also included in amended claim 1) was known from Ratcliff. This is also traversed. The HNI described in Ratcliff communicates with a partition using a hardware means (like internal LAN). The only packets passed over such a communication channel are inbound/outbound data frames. There is no control information exchanged between software running on the HNI and in a partition. Ratcliff clearly describes the packet forwarding process in which any outgoing packet received by HNI is forwarded to the external network and any incoming packet received from the external network is forwarded to one or many partitions. There is no extra (control) packets created by the

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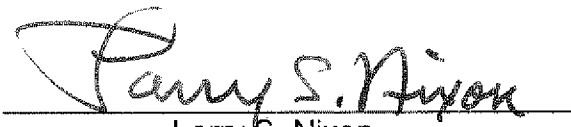
HNI software in order to send specific control information to software running in partitions. Accordingly, the corresponding features from original claim 15 further distinguish amended claim 1 from Ratcliff.

Accordingly, this entire application is now believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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